Via E-File

PATENT APPLICATION
Docket: 14531.27.2.2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND
INTERFERENCES

In re application of		)
	Stephen G. Perlman	)
Serial No.:	09/557,196	)
	April 21, 2000	) Art Unit 2167
Confirmation No.:	6989	)
For:	SYSTEM AND METHOD FOR TUNING CHANNELS USING A CENTRAL POINT OF CONTROL	)
Examiner:	Chau T. Nguyen	)
Customer No.:	047973	)

BRIEF OF APPELLANTS

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

On May 11, 2006, Appellant timely filed a Notice of Appeal from the action of the Examiner finally rejecting claims 1-19 in this application. This appeal brief is being filed under the provisions of 37 C.F.R. § 41.37. The filing fee of $500.00, as set forth in 37 C.F.R. § 41.20(b)(2), is submitted herewith. This brief is being filed on July 10, 2006 and is therefore timely under 37 C.F.R. § 41.37(a)(1) and 35 U.S.C. § 21(b).

REAL PARTY IN INTEREST

The real party in interest is Microsoft Corporation, by way of assignment to WebTV Networks, Inc. (now merged with Microsoft Corporation) from Stephen G. Perlman, who is the named inventor. The assignment documents were recorded at Reel No. 9761, Frame 0179 in the United States Patent and Trademark Office on February 4, 1999.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

The application was originally filed with claims 1-14. Claims 15-17 were added by Amendment "B" dated February 10, 2004. Claims 18-19 were added by Amendment "C" dated July 22, 2004. Claim 20 was added by Amendment "D" dated March 11, 2005, but was subsequently cancelled by Amendment "E" dated August 16, 2005. Pending claims 1-19 have been appealed.

STATUS OF AMENDMENTS

Amendments "A" through "F" have all been entered by the Examiner, and claims 1-19 are presented on appeal in the same form as that finally rejected by the Examiner.

SUMMARY OF CLAIMED SUBJECT MATTER

The appealed claims are directed to methods and devices for a central device that uses electronic programming guide data to determine whether the signal of a user-selected channel is carrying scrambled or non-scrambled programming. If the central device determines that the signal is carrying non-scrambled programming, then the central device tunes to the channel(s) carrying the non-scrambled programming for display on a display device. On the other hand, if the central device determines that the signal is carrying scrambled programming, then the central device routes the scrambled signal to a descrambler to be descrambled and tuned to the channel(s) carrying the scrambled programming for display on a display device.

There are three independent claims: claims 1, 5, and 8. Claim 1 is directed to a method performed by the central device. Claim 5 comprises a computer program product claim correspondingly similar to claim 1. Claim 8 is directed to a tuning system used to implement the method of claim 1. Thus, the invention claimed in independent claims 1, 5, and 8 will be summarized below.

The television has been a source of home entertainment since its inception. (*See* Specification, at 2:19-24). The television has been the basis for the evolution of home entertainment centers that offer increasingly versatile and complex functions with the invention of devices that connect to a television, such as VCRs, video disk players, video game consoles, Internet terminals, and cable and satellite receivers. (*See id.* at 3:1-10). A consequence of connecting multiple electronic consumer devices to a television, however, is the increasing difficulty of appropriately connecting and interconnecting multiple electronic consumer devices such that the performance of each device is maximized.

"The conventional method for connecting devices in a home entertainment system is the 'daisy chain' method." (*Id.* at 3:22-23). The daisy chain method of connecting electronic consumer devices connects the devices such that the devices form a chain extending from the programming signal input to the television, as illustrated in Figure 3 reproduced below.

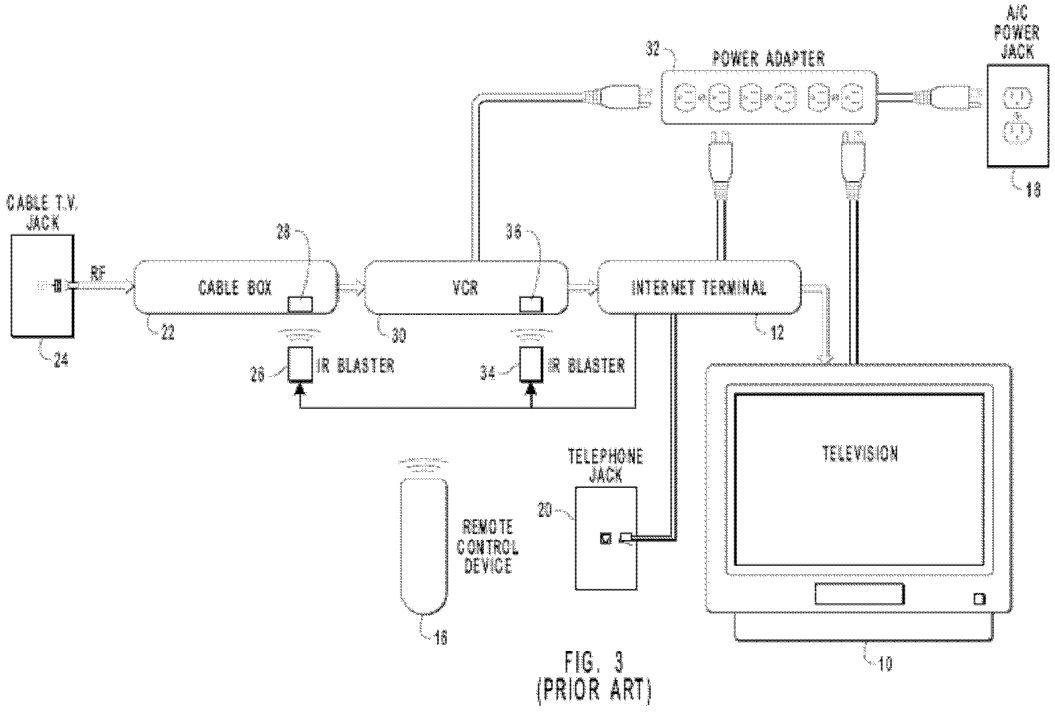


FIG. 3
(PRIOR ART)

In Figure 3, a cable T.V. jack 24 is connected to a cable box 22, which is connected to VCR 30, which is connected to Internet terminal 12, which is connected to Television 10, thereby creating a "chain" of consumer electronic devices. One problem presented by the daisy chain method of interconnecting consumer electronic devices regards tuning signals carrying television programming. For example, in the entertainment system depicted in Figure 3, the Television 30, Internet terminal 12, VCR 30 and cable box 22 must each be tuned to a specific, and potentially different, channel to view a desired program. (*Id.* at 14-20). This problem is exacerbated by the fact that the necessary channel required by each device may change depending on which devices

in the daisy chain are turned "on" and are being used, and which devices are turned "off" and are just "passing through" the signal. (*Id.* at 6:15-16).

These tuning problems created by interconnecting the consumer electronic devices in a home entertainment center using the daisy chain method may be overcome with the invention of the present application. One embodiment of the present invention, depicted in Figure 6 reproduced below, utilizes a central electronics device 40 to interconnect the consumer electronic devices of home entertainment system in a "hub and spoke" configuration, as opposed to the conventional daisy chain method.

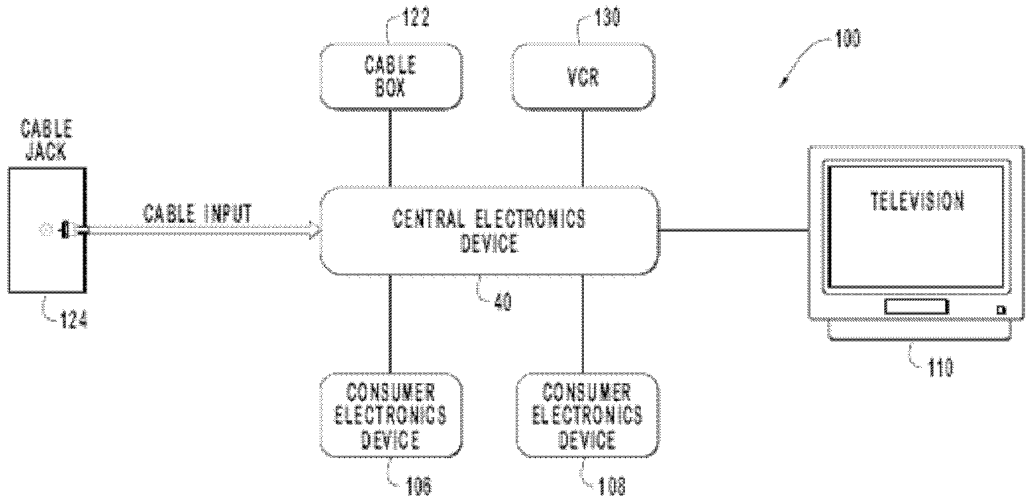


FIG. 6

As seen in Figure 6, the central electronics device 40 acts as a "hub," to which each consumer electronic device is attached as a "spoke" to that hub. (*Id.* at 18:13-19). The central electronics device "is capable of interconnecting the consumer electronics devices in the hub and spoke configuration, of routing signals and of tuning channels."

As regards incoming television channels, the central electronics device performs at least three important functions: 1) receiving a user-selected channel that corresponds to signal carrying programming; 2) discerning whether the programming is scrambled or non-scrambled;

and 3) if the programming is non-scrambled then tuning the signals carrying the non-scrambled programming, and if the programming is scrambled then routing the scrambled programming to a descrambler. (*Id.* at 21:11-22; claim 1).

In order to determine whether the programming of a selected channel is scrambled, the central electronics device utilizes electronic programming guide (EPG) data. (Specification, at 21:13-15). The central electronics device stores a copy of the EPG data. (*Id.*) The EPG data contains information that, among other things, indicates which channels contain scrambled programming and which channels contain non-scrambled programming at any given time. (*See id.* at 21:13-15, 24:16-23). Channels that the EPG data indicates are scrambled are routed to the cable box 122, and channels that the EPG data indicates are non-scrambled are tuned at the central device, as discussed in further detail below. (*Id.* at 21:13-18). Importantly, the central electronics device does not alter the EPG, but merely uses the EPG data as a source of information indicating which channels are scrambled and which channels are non-scrambled.

Channels that the EPG data indicates are non-scrambled are tuned by an internal tuner of the central electronics device and are not routed for tuning by another electronics device. (*Id.* at 21:16-18). "Tuning non-scrambled channels in central electronics device 40 takes advantage of the tuner in device 40 that may be significantly faster than the tuner in cable box 122." (*Id.* at 18-20).

ISSUES TO BE REVIEWED ON APPEAL

1. Did the Examiner err in rejecting claims 1-19 under 35 U.S.C. § 103(a) as being unpatentable over Kurtz (U.S. Patent No. 5,574,440) in view of Macrae (U.S. Patent No. 6,745,391)?

ARGUMENT

I. Introduction

All of the claims at issue require a tuner that is located at the central device to tune signals carrying non-scrambled programming. All of the claims at issue further require the central device to use EPG data to determine whether an incoming signal is carrying scrambled or non-scrambled programming. Claims 1-4, 15 and 18 have an additional limitation requiring the central device to receive a user input that selects a channel that corresponds to a signal carrying programming. The Examiner has not identified in the prior art a central device with an internal tuner, or a central device that uses EPG data to determine whether a signal is carrying scrambled or non-scrambled programming as required by the claims. The Examiner has also not identified a central device that receives user input that selects a channel corresponding to a signal carrying programming as claims 1-4, 15, and 18 require. As such, the Examiner has failed to establish a *prima facie* case of obviousness for any of claims 1-19.

II. The Examiner Has Not Established a *Prima Facie* Case of Obviousness for Any Claim

A. The Prior Art Cited by the Examiner Does Not Use EPG Data to Determine Whether a Signal Is Carrying Scrambled or Non-scrambled Programming, and Does Not Teach a Tuner Located at the Central Device as Required by All Claims

1. All Claims Require the Central Device To Use EPG Data To Determine Whether a Signal Is Carrying Scrambled or Non-Scrambled Programming, and a Tuner Located at the Central Device for Tuning Signals Carrying Non-scrambled Programming

Claim 1 reads as follows:

1. In a home entertainment system including a central device coupled to a plurality of electronics devices, wherein the plurality of electronics devices includes a display device and a descrambler, and wherein the central device manages the operation of the plurality of electronics devices, a method for tuning channels that are requested by a user for display on the display device, the method comprising the steps for:

receiving user input at the central device, wherein the user input selects a channel that corresponds to a signal carrying programming, and wherein the signal is received by the entertainment system;

using electronic programming guide data stored at the central device to determine whether the signal is scrambled or non-scrambled, wherein both the scrambled and the non-scrambled signals have to be tuned before being displayed;

if the signal is determined from the electronic programming guide data to be scrambled, performing the steps for:

routing the scrambled signal from the central device to the descrambler; and

using the descrambler to descramble and tune to one or more channels of the scrambled signal for display on the display device; and

if the signal is determined from the electronic programming guide to be non-scrambled, performing the step for:

using an internal tuner that is located at the central device to tune to one or more channels of the non-scrambled signal for display on the display device, and such that the non-scrambled signal can be displayed.

Significantly, the second paragraph of the body of claim 1 requires "using ***electronic programming guide data*** stored at the central device to determine whether the signal is scrambled or non-scrambled[.]" The specification teaches that the central electronic device "includes an EPG store 220 for storing an electronic programming guide that includes video programming information relating to television programming available to be viewed or recorded with the home entertainment system." (Specification, at 24:16-19). The EPG data stored at the central device informs the central device which channels carry scrambled programming and which channels carry non-scrambled programming. (*Id.* at 21:13-15). The last paragraph of claim 1 requires "using an ***internal tuner that is located at the central device to tune*** to one or more channels of the non-scrambled signal[.]" The Specification explains that using an internal tuner located at the central device may be significantly faster than routing a non-scrambled signal

to a descrambler to be tuned. (*Id.* at 21:18-20). Thus, the central device must use EPG data to determine whether a channel is carrying scrambled or non-scrambled programming, and must contain a tuner for tuning signals carrying non-scrambled programming.

Claim 5 effectively has the same requirements. Claim 5 reads as follows:

5. A computer program product for implementing in an entertainment system that includes a central device coupled to a plurality of electronics devices, wherein the central device manages the operation of the electronics devices, a computer program product for implementing a method for tuning signals carrying programming that correspond to channels selected by a user, the computer program product comprising:

a computer-readable medium carrying computer executable instructions for performing the method, wherein the method comprises steps for:

using electronic programming guide data stored at the central device to determine whether the signal is scrambled or non-scrambled, wherein both the scrambled and the non-scrambled signals have to be tuned before being displayed;

if the signal is determined from the electronic programming guide data to be scrambled, performing the steps for:

routing the scrambled signal from the central device to the descrambler; and

using the descrambler to descramble and tune to one or more channels of the scrambled signal for display on the display device; and

if the signal is determined from the electronic programming guide to be non-scrambled, performing the step for:

using an internal tuner that is located at the central device to tune to one or more channels of the non-scrambled signal for display on the display device, and such that the non-scrambled signal can be displayed.

Again, the second paragraph of the body requires "using ***electronic programming guide data*** stored at the central device to determine whether the signal is scrambled or non-scrambled[.]" The last paragraph of claim 5 requires "using an ***internal tuner that is located at the central device to tune*** to one or more channels of the non-scrambled signal[.]"

Claim 8 also requires the central device to use EPG data to determine whether a signal is carrying scrambled or non-scrambled programming, and a tuner to be located at the central device for tuning signals carrying non-scrambled programming:

8. A tuning system for use in an entertainment system that includes a plurality of consumer electronics devices coupled to a central device, wherein the central device manages the operation of the consumer electronics devices, and wherein all signals received by the entertainment system pass through the central device, the tuning system comprising:

a first tuner that is located at the central device, wherein the first tuner tunes signals to one or more channels carrying programming that is non-scrambled, wherein the non-scrambled signal must be tuned prior to being displayed;

a second tuner at a descrambling device, wherein the descrambling device is one of the plurality of consumer electronics devices coupled to the central device, wherein the central device routes the scrambled signal to the descrambling device, and wherein the second tuner tunes signals to one or more channels carrying programming that is scrambled; and

an electronic programming guide stored at the central device, wherein the electronic programming guide includes data specifying whether a signal carrying programming is scrambled or non-scrambled and wherein the tuning system uses the electronic programming guide to determine whether the signal carrying programming is scrambled or non-scrambled.

The last paragraph of the body of claim 8 requires "an electronic programming guide stored at the central device" and "***us[ing] the electronic programming guide*** to determine whether the signal carrying programming is scrambled or non-scrambled." The first paragraph of the body requires "a first ***tuner that is located at the central device***, wherein the first tuner tunes signals to one or more channels carrying programming that is non-scrambled[.]"

In summary, all of the claims require the central device to store EPG data. Importantly, the central device uses that EPG to determine which signals are carrying scrambled programming, and which signals are carrying non-scrambled programming. All of the claims

also require a tuner to be located at the central device. The tuner located at the central device is used to tune signals carrying non-scrambled programming, thereby removing the need for other electronic devices to tune those signals.

2. The Kurtz Invention

The Examiner rejected all of the claims as being obvious based primarily on Kurtz in view of Macrae. (Office Action mailed Jan. 11, 2006 ("Office Action"), at 2). The invention of Kurtz (U.S. Patent No. 5,574,440) is directed to a switching apparatus that restores the tuning and other features of VCRs and TVs, which features are lost when programming signals are routed through a converter box and descrambler before being routed to the VCR and TV. (Kurtz, at 2:13-29).

a) Background of the Kurtz Invention

Cable television providers offer subscribers bundled "non-premium" channels with the option to purchase individual "premium" and pay per view channels for an additional charge. (*Id.* at 1:41-44). "To protect the premium and pay per view presentations, cable companies typically will 'scramble' the transmission of those broadcasts and, in turn, install a 'descrambler' with each subscriber[.]" (*Id.* at 1:53-56).

> Interestingly, the typical descrambler is only capable of operating on one particular frequency, necessitating that any premium channel selected for viewing or recording must first be converted to that one frequency before it can be descrambled. Thus, the descrambler must be connected to the output of a frequency "converter box" or integrated into one. All channel tuning functions then, for both standard and premium channels, must by necessity be accomplished within the converter box.

(*Id.* at 1:59-67).

Routing all of the incoming programming signals through the converter/descrambler causes several problems. First and foremost, using the converter/descrambler to tune the non-scrambled channels disables the tuning capabilities of the VCR and TV. (*Id.* at 2:14-18).

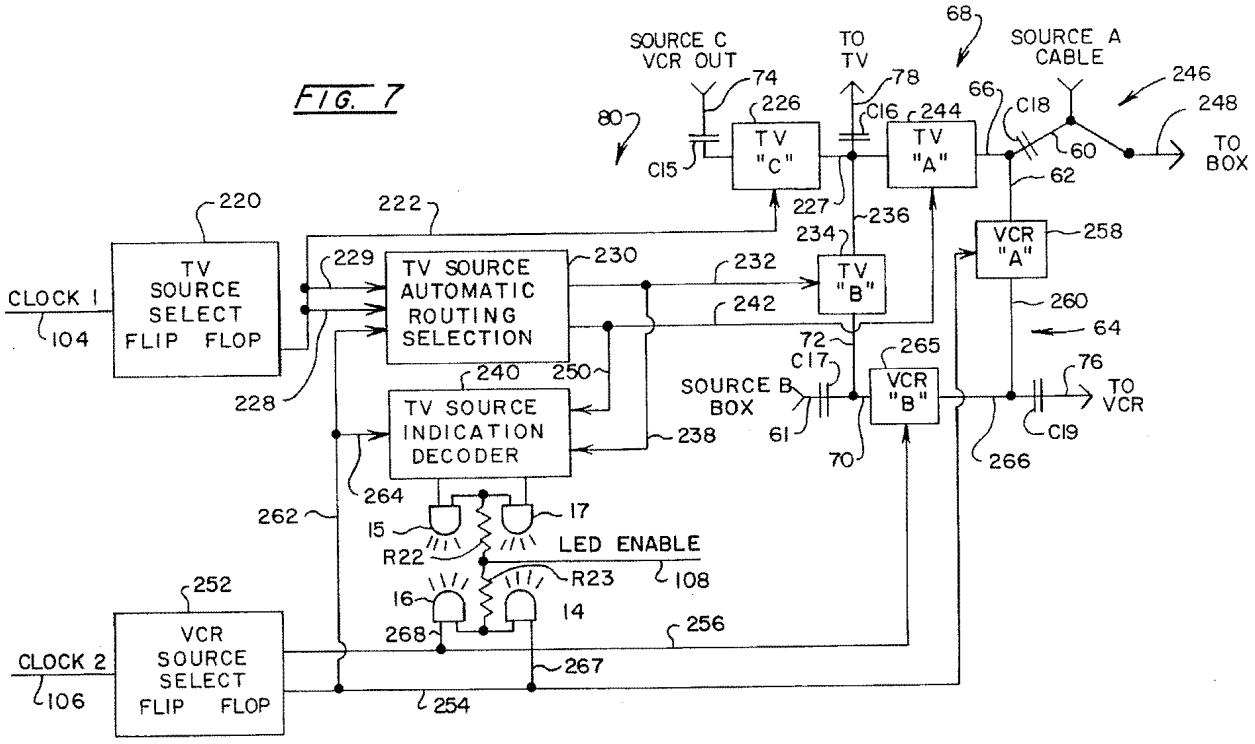
Without their tuning capabilities, VCRs and TVs lose additional functions, such as use of the remote controls for the VCR and TV to perform certain functions, programming the VCR to record selected channels at different future times, displaying channel names or numbers on the TV display, using picture in picture operations on the TV, or recording one channel at the VCR while watching another channel on the TV. (*Id.* at 2:14-29).

Prior art solutions to these problems placed a splitter with an RF, AB switch between the incoming cable and the converter box. (*Id.* at 2:37-42). The splitter indiscriminately divides the input of the cable into two streams: Source A, which is routed directly to the VCR and/or TV, thereby bypassing the converter/descrambler, and Source B, which passes through the converter/descrambler. (*Id.* at 2:37-48). By thus splitting the incoming signal, "[a]t times when the descrambler is not required, the cable operator's equipment [i.e. converter/descrambler] is 'bypassed' by selecting Source A, thus restoring all features and capabilities of the VCR and TV." (*Id.* at 2:45-48). The drawbacks of using this simple RF, AB switch of the prior art are: 1) "this switching arrangement is difficult to install[;]" 2) it either lacks remote-control switching capabilities, or requires a "dedicated remoter-control unit"; and 3) it requires splitting the signal further to employ independent switching for both the TV and the VCR, which further degrades the signal strength.

Kurtz teaches improvements to the prior art RF, AB switch that overcome these drawbacks of the prior art by employing a switching unit that: 1) is easier to install; 2) can be actuated by any remote control unit to switch between Source A and Source B independently for the VCR and TV (*id.* at 3:15-21); and 3) utilizes the internal signal splitting function of VCRs to avoid the need of another splitter to employ independent switching for both the TV and the VCR (*id.* at 3:4-49).

b) Configuration of the Kurtz Invention

The configuration of Kurtz will be explained with reference to Figure 7, reproduced below:



As seen in Figure 7, Kurtz receives a programming signal from a cable and is designated "Source A." Source A is split by an RF power splitter 246, which "provid[es] for the submission of non-premium cable signals through lines 66 and 62, and, as represented at line 248, providing cable signals to the input of a converter box." (*Id.* at 12:67-13:3). Importantly, the portion of Source A that is routed to the converter box becomes Source B after exiting the converter box and returning to the switch. (*Id.* at Fig. 7). Thus, Source A and Source B contain the same scrambled and non-scrambled programming signals, but the scrambled programming signals originally present in Source A have been tuned by the converter box and descrambled in Source B. The other portion of Source A is routed directly to the boxes 258, labeled "VCR 'A,'" and

244, labeled "TV 'A.'" (*Id.*) Source B returning from the converter box is similarly routed to the boxes 265, labeled "VCR 'B,'" and 234, labeled "TV 'B.'"

In this configuration a viewer may use a remote control to switch between Source A and Source B for the TV and the VCR.[1] For example, if a viewer continuously depresses a button of a remote control for about three seconds, "then the logic condition at 'CLOCK 2' at line 106 causes an alternating selection at a VCR source select flip-flop function represented at block 252[.]" (*Id.* at 13:10-14). The "flip-flop function" 252 switches the input source for the VCR between Source B, indicated by box 265 labeled "VCR 'B,'" and Source A, indicated by box 258 labeled "VCR 'A.'" (*Id.* at 13:10-21; 15:10-27). Thus, by continuously depressing any button on a remote control for about three seconds, a viewer may switch the input source for the VCR back and forth between Source A and Source B. (*Id.* at 3:15-35). By using the ***duration*** of the signal emitted from the remote control unit (as opposed to a specific frequency) to actuate the switching function, Kurtz provides the additional advantage of allowing a viewer to switch between Source A and Source B for both the TV and VCR with any conventional remote control. This teaching of Kurtz eliminates the need for either manual switching between sources or for a remote control device dedicated to the switching function. (*See id.* at 3:15-21).

Kurtz also teaches using LEDs (light emitting diodes) to inform the viewer whether he or she has selected Source A or Source B for the TV and the VCR. The illumination of a green LED indicates that the TV or VCR is receiving input from Source A and that all the features of the VCR or TV are available for use. (*Id.* at 5:8-19). Similarly, illumination of a red LED indicates that the TV or VCR is receiving input from Source B, and, consequently, that certain features of the VCR or TV are not available for use. (*Id.*)

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[1] The switching works similarly for the TV and the VCR, except the TV has an additional possible "Source C" coming from the output of the VCR.

Kurtz explains the functioning of the LEDs with reference to Figure 7, reproduced above. LEDs 14 (green) and 16 (red) indicate the source of programming received by the VCR and are coupled to lines 256 and 254 via lines 268 and 267, respectively. (*Id.* 13:40-49). If a viewer desires to switch the VCR input from Source A to Source B, then the user will depress a button on a remote control for about three seconds. (*Id.* at 15:23-27). During the three-second interval, the green LED 14 will illuminate because line 267 connects it to line 254, which is electrically closed (meaning that the connection is conveying a signal (*see id.* at 10:29-32)). (*Id.* at 15:26-30). At the end of the three-second interval, the "VCR source select" 252 will switch the signal from line 254 to line 256, thereby switching the input of the VCR to Source B and extinguishing green LED 14. (*Id.* at 15:30-43). Switching to Source B also illuminates red LED 16, which is connected by line 268 to the now electrically closed line 256. (*Id.*). The illuminated red LED 16 indicates to the user that the VCR is now receiving input from Source B, and that the features of the VCR are not available for use because the programming is being routed through the converter/descrambler. (*Id.* at 5:8-19). Importantly, neither Source A nor Source B flows through the LEDs or through any component upstream to the LEDs. Consequently, neither the LEDs nor any component sending a signal to the LEDs could possibly make a determination as to whether the programming of Source A or Source B is scrambled or non-scrambled. The LEDs merely indicate to the user whether he or she has selected Source A or Source B as the input to the VCR or TV.

c) Kurtz Does Teach a Device or Method for Determining Whether a Signal Is Carrying Scrambled or Non-scrambled Programming

As explained above, every claim of the present application requires the central device "to determine whether the signal is scrambled or non-scrambled[.]" The Examiner argues that the

switching device of disclosed in Kurtz "has green and red light emitting diodes (LEDs) which indicate the signal is scrambled (premium) or non-scrambled (non-premium)[.]" (Office Action at 3). The Examiner's assertion is mistaken for at least two reasons: 1) the Examiner does not cite to any passage or figure of Kurtz teaching that the device disclosed therein distinguishes between scrambled and non-scrambled programming; and 2) the Examiner conflates an indication of the source of a signal with a determination regarding the content of the signal.

(1) Kurtz Does Not Teach an Apparatus or Method for Determining Whether Programming Is Scrambled or Non-scrambled

First, the switch disclosed in Kurtz does not make a determination as to whether a programming signal is scrambled or not. As explained above, Kurtz employs an RF splitter on the incoming cable to send a portion of the signal to the converter/descrambler, and a portion directly to the VCR and TV. Importantly, the RF splitter does not have the capability of determining whether a signal is carrying scrambled or non-scrambled programming. To better illustrate how a RF splitter works, consider the following analogy: The incoming cable carrying the signal is analogous to a rubber hose carrying water. The RF splitter is analogous to a Y-shaped hose bib. When the Y-shaped hose bib is attached to the end of the hose, the water flowing through the hose is split into two parts, each diverted in a different direction that may be turned on or off independently using a switch. The hose bib makes no determination regarding the characteristics of the water, but indiscriminately splits the water into two streams, one for each branch of the Y-shaped hose bib. The RF, AB switch works in precisely the same manner, indiscriminately routing a portion of the incoming signal Source A directly to the TV and VCR, and the other portion to the converter/descrambler, which portion is labeled Source B after it exits the converter/descrambler.

Both Source A and Source B actually contain both scrambled and non-scrambled programming. Kurtz's description of Figure 5 makes it particularly clear that the RF splitter does not discriminate between scrambled and non-scrambled programming, and that both Source A and Source B contain both scrambled and non-scrambled programming:

> The arrangement of FIG. 5 initially provides for the selection of ***source A*** as at line 170, for example ***representing a non-premium cable input***. ***This source, as described above, may be split by a two-way RF power splitter*** as represented generally at 17 1 [sic], ***to provide an input to a cable converter box*** via line 172. ***The output of that cable converter box then may become a second source or source B***, the input of which is represented at line 174.

(Kurtz, at 10:19-27 (emphasis added)). Thus, Source A actually ***becomes*** Source B by merely passing through the converter/descrambler, wherein the scrambled programming apparently present in Source A is descrambled. (*See, e.g.,* Kurtz, at 2:9-11 ("Often, the descrambler is of such a design that it is activated continuously, even during the use of non-scrambled channels.")). In other words, both Source A and Source B contain the same scrambled and non-scrambled programming. The only difference between Source A and Source B is that the scrambled programming present in both Sources has been descrambled in Source B.

Although both Source A and Source B carry both types of signals, the specification of Kurtz at times refers to Source A as "non-scrambled" or "non-premium" programming and Source B as "scrambled" or "premium" programming. This naming convention is understandable given the underlying premise of the Kurtz invention: that viewers using the invention of Kurtz will switch to Source A to view non-scrambled or non-premium programming because this source allows the viewer to use the features of the VCR and TV, and will switch to Source B to view scrambled or premium programming because that programming must be routed through the converter/descrambler before viewing. Thus, although both sources contain both the scrambled and non-scrambled programming, the premise of Kurtz is that viewers always will

view non-scrambled programming using Source A (because this allows retention of VCR and TV features), and always will view scrambled programming on Source B (because scrambled programming is still scrambled in Source A and thus not suitable for viewing). Nowhere does Kurtz teach an apparatus or method that can ***distinguish*** between the scrambled and non-scrambled programming. Kurtz merely provides the viewer the capability of bypassing the converter/decoder by switching sources, but the ***viewer*** must recognize whether programming is scrambled or non-scrambled, decide which source to use accordingly.[2]

The Examiner cites to the Abstract, col. 2, line 37 – col. 3, line 11, col. 4, line 47 – col. 5, line 21 and Fig. 1" in Kurtz as teaching "determining at the central device whether the signal is scrambled or non-scrambled[.]" (Office Action, at 3). None of these citations, when read in context of the entire patent, teaches this limitation.

The Abstract mere teaches an "[a]pparatus and method for switching between two input sources to a television receiver and/or video recording device." (Kurtz, at Abstract). The Abstract does not even mention scrambled or non-scrambled signals, let alone teach an apparatus or method for distinguishing between the two.

Column 1, line 11 – col. 2, line 7, is similarly void of any teaching of an apparatus or method for determining whether a signal is scrambled or non-scrambled. This passage merely discusses the state of the art prior to the invention of Kurtz and the aspects of cable television that give rise to the need for device that can switch between two sources of programming. Nothing in this passage discusses ***how*** to determine whether a signal is scrambled "premium" programming or non-scrambled "non-premium" programming.

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[2] Because viewers must pay a surcharge for access to scrambled "premium" programming, such as HBO, viewers likely know to which "premium" channels the viewer has subscribed. Viewers also likely know that the "premium" channels must be routed through the converter/descrambler before viewing and may thus easily determine whether to use Source A or Source B to view any particular channel.

The passage at col. 4, line 47 – col. 5, line 21 also does not teach an apparatus and/or method for ***determining*** whether a signal is scrambled or non-scrambled. This passage discusses two signal sources: "the output of a cable converter box and non-premium cable programming suited for a cable ready TV tuning system." (*Id.* at 4:52-54). As explained above, however, Kurtz teaches that the output from the cable converter box contains the non-scrambled non-premium programming in addition to the descrambled premium programming. The remainder of this passage discusses the LEDs of the Kurtz invention, which are used to indicate to the viewer whether he or she has selected Source A or Source B for each of the VCR and TV. As discussed above, no programming flows through the LED or through any component sending a signal to the LEDs. Consequently, the LEDs cannot determine whether the programming is scrambled or non-scrambled.

Finally, Figure 1 does not provide any information regarding whether or how the Kurtz invention could determine whether programming is scrambled or non-scrambled. Figure 1 merely depicts the exterior of the device, showing where various cables are attached to the device and the location of the LEDs on the front of the device. The Examiner has not cited to any passage or figure of Kurtz teaching a device that ***determines*** whether programming is scrambled or non-scrambled.

(2) The Examiner Conflates "Indicating the Source of a Signal" with "Determining Whether the Signal Is Scrambled or Non-scrambled"

Second, the Examiner fails to acknowledge the difference between "indicating" the source of a signal, as taught by Kurtz, and making a "determination" of whether a signal is scrambled or non-scrambled, which is not taught by Kurtz.

The Examiner states that "the central device has green and red light emitting diodes (LEDs) which ***indicate*** the signal is scrambled (premium) or non-scrambled (non premium)[.]" (Office Action, at 3 (emphasis added) (citing Kurtz, at 4:7-5:21)). The Examiner is correct that the LEDs ***indicate*** whether the user has selected Source A or Source B as the input for the VCR or TV, but ***indicating*** the source of the signal does not satisfy the "***determining*** whether a signal is scrambled or non-scrambled" limitation of the claims. As explained above, the LEDs cannot make a determination regarding whether the signals of Source A or Source B are scrambled or non-scrambled because neither Source A nor Source B flows through the LEDs or through any component that provides a signal to the LEDs. The LEDs are actuated in conjunction with the TV Source Select Flip Flop 220 and VCR Source Select Flip Flop 252, which in turn are actuated by the viewer depressing a button on a remote control unit. The characteristics of the programming signals of Source A and Source B, i.e. whether the signals are scrambled or non-scrambled, in no way affect the illumination of the LEDs. Rather, the LEDs merely ***indicate*** to the viewer whether ***he or she*** has selected Source A or Source B as the input for the VCR or TV. (*See* Kurtz, at 3:67-4:7 "***To aid the user in being cognizant of the source status*** then present for either or both the television receiver or the video recorder, ***visual indicators of that status*** are provided with the apparatus. In this regard, a green light emitting diode (LED) is energized during remote actuation procedures ***to indicate*** that a non-premium source ***is switched*** into the unit being controlled.") (emphasis added)). Because the LEDs do not make a "determination" as to whether the signals of Source A or Source B are scrambled or non-scrambled, the LEDs do not satisfy the "determining whether the signal is scrambled or non-scrambled" element of the claims.

d) Kurtz Does Not Teach Using a Tuning Device Located at the Central Electronics Device

As noted above, the purpose of the invention disclosed in Kurtz is to route non-scrambled programming directly to the VCR or TV, bypassing the converter/descrambler and "thus restoring all the features and capabilities of the TV and VCR." (Kurtz, at 2:45-48). The features and capabilities of the TV and VCR are restored by routing the programming signal directly to the TV and VCR ***for tuning***:

> For example, the [VCR] device cannot be programmed to record a selected channel at a future time and, for example, a different channel at another time, ***inasmuch as the channel tuning capability of the VCR has been lost***. In similar fashion, the enhancement of the television receiver itself, for example displaying channel names or numbers or providing for picture in picture operations are lost. Even worse, it is no longer possible to record one channel while watching another, ***as the converter box is the only functioning tuning device***.

(*Id.* at 2:19-29 (emphasis added)). The very purpose of the Kurtz invention is to allow the TV and VCR to tune non-scrambled programming, thereby restoring the other features and capabilities of the TV and VCR, by bypassing the tuning that occurs in the converter/descrambler. Consequently, using an internal tuner located at the central device to tune non-scrambled signals is directly contrary to the teachings of Kurtz.

That Kurtz teaches using the tuning capabilities of the TV and VCR as opposed to an internal tuner at the RF, AB switch is further taught at Figure 8 and col. 14, lines 13-16: "Inductor 282 serves to shunt stray low frequency voltages emanating ***from the TV tuner*** at connector 26[.]" (*See also id.* at 14:50-52 ("Inductor 300 serves the same purpose with respect to a ***VCR tuner***, for example, as previously described inductor 282 serves with respect to the ***TV tuner***." (emphasis added)). Thus, Kurtz specifically uses inductors as shunts to protect the RF, AB switch from undesired voltages that emanate from the tuners in the TV and VCR.

In support of his argument that Kurtz teaches using an internal tuner located at the central electronics device, the Examiner cites to Kurtz at col. 3, line 40 – col. 4, line 12. (Office Action, at 4). The only sentences in this passage that even address tuners or tuning a signal state: "It should be noted that if only one premium channel is subscribed to, then, the converter box remote control transmitter is not longer needed. The ***converter box*** is simply left ***tuned*** to that channel." (Kurtz, at 3:64-67). This passage at most teaches a tuner located at the converter box, not at the central device. No other portion of this passage cited by the Examiner mentions tuners or tuning signals either explicitly or implicitly. Thus, this citation does not support the Examiner's argument.

The Examiner also cites to col. 4, line 47 – col. 6, line 18 as teaching an internal tuner located at the central device. (Office Action, at 4). The only portion of this passage that refers to a tuner or tuning a signal states: "Switching apparatus 10 is intended for use in a home-environment wherein two implements such as a television receiver and VCR are operated in conjunction with two sources, for example, the output of a cable converter box and non-premium cable programming suited for a cable ready ***TV tuning system***." (Kurtz, at 4:49-54). This passage at most teaches that the TV has an internal tuner, and clearly does not teach a tuner located at a central device. No other portion of this passage cited by the Examiner mentions tuners or tuning signals.

Lastly, the Examiner cites to Figures 1 and 2 in support of the argument that Kurtz teaches an internal tuner located at the central device. (Office Action, at 4). No part in either Figure 1 or Figure 2 is labeled as a tuner or described by the specification as performing a tuning function. Consequently, neither of these figures teaches an internal tuner located at the central device.

The Examiner describes the citations discussed above as teaching that "where the signal source selected is a non-premium (non-scramble) channel input, the viewer is provided the use of all the various built-in programming (tuner) and television receiver." (Office Action, at 4). First, nowhere in Kurtz are the words "programming" and "tuner" used interchangeably. Thus, it is unclear what the Examiner means by placing the word "tuner" in parentheses. Second, even assuming that the Examiner meant to quote Kurtz at col. 3, lines 58-61, which states that after selecting "a non-premium channel input, the viewer is provided the use of all the various built-in programming and viewing features of the video recorder and/or television receiver[,]" this statement does not teach a tuner located at a central device. As explained above, this statement merely confirms that tuners located at the TV and VCR tune non-premium or non-scrambled programming, which is directly contrary to the Examiner's assertion of a tuner located at the central device.

3. The Macrae Invention

Conceding that Kurtz does not teach using EPG data to determine whether a programming signal is scrambled or non-scrambled, the Examiner relies on Macrae (U.S. Patent No. 6,745,391) for this element. The invention disclosed in Macrae is directed to a system and process that "updates the EPG database when one of the regularly scrambled television channels is now unscrambled." (Macrae, at 1:64-66).

a) The Background of the Macrae Invention

Cable and direct satellite service providers "scramble their signals thereby allowing only a selected group of people who have prearranged de-scrambling capabilities to receive their signals." (*Id.* at 1:31-34). "Occasionally, however, a cable or direct satellite service provider will unscramble its signals for a particular time period to allow all viewers in a given area to have access to the signals." (*Id.* at 1:37-40). "For example, HBO may have a free movie night

for subscribers and non-subscribers of HBO in Fremont, Calif. In this manner, HBO could show potential subscribers in Fremont, Calif., a flavor of the programming it has available, and may attract some of the non-subscribers in Fremont to sign up with its service." (*Id.* at 1:41-45). The invention of Macrae is directed to a system and method for identifying when such a programming signal that is typically scrambled, such as HBO, is going to be broadcast non-scrambled as promotion for the service, and for notifying viewers of the promotional programming by updating the EPG database. (*Id.* at 1:58-2:3).

b) Configuration of the Macrae Invention

Macrae describes two embodiments for determining whether a previously scrambled signal will be broadcast as non-scrambled. The first embodiment "utilizes a detector for determining whether one of the regularly scrambled television channels is now unscrambled." (Macrae, at 11:10-15).

> The system detector 302 [in Figure 2] determines if the channels are scrambled or unscrambled regardless of whether the incoming signal is analog or digital. A processor 304 coupled to the detector 302 updates the EPG database if the output of the detector indicates that a previously scrambled program is now unscrambled. In doing so, the processor 304 adds listings of television programs transmitted in the now unscrambled channel, into the EPG database.

(*Id.* at 11:17-25). Importantly, a "detector" determines whether a "previously scrambled signal is now unscrambled." Only after the detector makes this scrambled/unscrambled determination does the processor, a component that is entirely separate from the detector, update the EPG data to reflect the changed status of the programming signal.

Macrae also teaches an alternative embodiment:

> [T]he system determines that a regularly scrambled channel is now unscrambled from information sent by the service provider. Thus, a separate detector is no longer needed. In this scenario, the service provider transmits data to the system as to the time periods during which the unscrambling will take place. ***At the start of such period, data in the EPG database is updated*** to reflect the fact that the channel is now unscrambled.

(*Id.* at 11:35-43). Once again, it is important to note that in this embodiment the EPG data is updated only ***after*** a determination has been made that a previously scrambled channel will be unscrambled.

c) Macrae Does Not Teach Using EPG Data to Determine Whether Programming Is Scrambled or Non-scrambled

The Examiner cites Macrae as teaching a system that uses EPG data to determine whether programming is scrambled or non-scrambled. (Office Action, at 4). However, as explained above, the invention disclosed in Macrae does not use the EPG data to determine whether programming is scrambled or non-scrambled, but is merely updated to reflect the status of the programming ***after*** the scrambled/unscrambled determination has been made. The passages cited by the Examiner are consistent with this understanding.

The Examiner cites to Macrae at col. 1, lines 54-57 as teaching using EPG data to determine whether programming is scrambled or non-scrambled. (Office Action, at 4). This passage merely states: "The present invention is directed to a television schedule information system, and more particularly to a system with the capability for detecting whether a program signal is scrambled or unscrambled." (Macrae, at 1:54-57). This passage merely states the invention detects whether a program signal is scrambled or unscrambled. This passage does not discuss how this detection is made or whether EPG is used to make this detection. Consequently, this passage does not teach using EPG data to determine whether a programming signal is scrambled or non-scrambled.

The Examiner also cites to Macrae at col. 3, lines 12-32. (Office Action, at 4). The pertinent portion of this passage states:

> Information in the data-stream may include television schedule information (EPG data). Software applications located within the peripheral devices utilize the schedule information provided in the data-stream ***to generate a schedule guide***. In addition, the software applications also determine whether a program signal is

> scrambled. If the program signal is scrambled, the system may advise the user of such status. Preferably, the system will only advise the user if a previously scrambled program signal is unscrambled by featuring the program prominently on the guide.

(Macrae, at 3:22-32). Here Macrae teaches using EPG data to generate a "schedule guide," not to determine whether programming is scrambled or non-scrambled. The passage goes on to teach that "the software applications also determine whether a program signal is scrambled." Once again, however, this passage does discuss how the software applications determine whether a program signal is scrambled. The description of ***how*** the invention of Macrae determines whether a program signal is scrambled is explained beginning at a section titled "H. Detecting Scrambling," at column 11, line 9, discussed above.

The last passage cited by the Examiner is at col. 11, lines 10-34. This passage is quoted above in connection with the section explaining the configuration of the Macrae invention. As that section establishes, the passage at col. 11, lines 10-34, clearly teaches that EPG data is not used to determine whether programming is scrambled or non-scrambled, but is merely updated to reflect the status of a signal after that determination has been made. Consequently, the Examiner has failed to cite any teaching in Macrae wherein EPG data is used to determine whether programming is scrambled or non-scrambled.

d) The Examiner Has Not Established a Motivation to Combine Kurtz and Macrae

Even assuming that Macrae teaches using EPG data to determine whether programming is scrambled or non-scrambled, which it does not as set forth above, no motivation exists to combine the teachings of Macrae with the teachings of Kurtz.

As explained in detail above, Kurtz does not make a determination regarding whether a programming signal is scrambled or non-scrambled. Instead, the invention disclosed in Kurtz routes both the scrambled and non-scrambled programming to the converter/descrambler, the

output of which becomes Source B, and directly to the VCR and TV through Source A. Because both Source A and Source B contain all the programming, scrambled and non-scrambled, using EPG data determine whether a source carried scrambled or non-scrambled programming would be superfluous. Alternatively, if Kurtz used EPG data to determine whether programming was scrambled or non-scrambled, and routed only scrambled programming to the converter/descrambler, the splitter described in Kurtz would become superfluous. In that scenario, the switch of Kurtz would not need to split the incoming signal because it could route the entire signal either to the converter/descrambler or directly to the TV and VCR after making a determination of whether the programming was scrambled or non-scrambled. Additionally, if the RF, AB switch of Kurtz used EPG data to route only the scrambled programming data to the converter/descrambler, then the use of a remote control unit to actuate the RF, AB switch also would become superfluous. If the central device of Kurtz were capable of determining whether a signal was scrambled or non-scrambled then it would be simple matter to route the signal different directions based on that determination. Thus, the user would not be required to use the remote control to actuate the switch and select a signal. Combining Macrae with Kurtz would vitiate many of the components and advantages employed by the invention disclosed in Kurtz. Consequently, no motivation exists to combine Macrae with Kurtz.

B. The Prior Art Cited by the Examiner Does Not Disclose a Central Device that Receives User Input Wherein the User Input Selects a Channel that Corresponds to a Signal Carrying Programming as Required by Claims 1-4, 15, and 18

1. Claims 1-4, 15, and 18 Require the Central Device to Receive User Input Wherein the User Input Selects a Channel that Corresponds to a Signal Carrying Programming

Claim 1 reads as follows:

1. In a home entertainment system including a central device coupled to a plurality

of electronics devices, wherein the plurality of electronics devices includes a display device and a descrambler, and wherein the central device manages the operation of the plurality of electronics devices, a method for tuning channels that are requested by a user for display on the display device, the method comprising the steps for:

receiving user input at the central device, wherein the user input selects a channel that corresponds to a signal carrying programming, and wherein the signal is received by the entertainment system;

using electronic programming guide data stored at the central device to determine whether the signal is scrambled or non-scrambled, wherein both the scrambled and the non-scrambled signals have to be tuned before being displayed;

if the signal is determined from the electronic programming guide data to be scrambled, performing the steps for:

routing the scrambled signal from the central device to the descrambler; and

using the descrambler to descramble and tune to one or more channels of the scrambled signal for display on the display device; and

if the signal is determined from the electronic programming guide to be non-scrambled, performing the step for:

using an internal tuner that is located at the central device to tune to one or more channels of the non-scrambled signal for display on the display device, and such that the non-scrambled signal can be displayed.

The first paragraph of the body of claim 1 requires "receiving user input at the central device, wherein the user input selects a channel that corresponds to a signal carrying programming[.]"[3] As explained above, a tuner is located at central electronics device for tuning non-scrambled programming signals. (Specification, at 21:11-22). Thus, it is important for the central electronics device to be able to receive user input selecting a channel that corresponds to a signal carrying programming so that the central device knows which channel to tune for display on the display device.

2. Kurtz Does Not Teach a Central Device that Receives User Input Wherein the User Input Selects a Channel that Corresponds to a Signal Carrying Programming

The RF, AB switch disclosed in Kurtz does not receive user input that selects a channel that corresponds to a signal carrying programming. As explained above, Kurtz discloses merely a switch that toggles between Sources A and B in connection with the VCR, and Sources A, B, and C in connection with the TV. Indeed, Kurtz calls the switching function associated with the TV the "TV source flip-flop function 220." (Kurtz, at 12:40-47). The source selection is referred to as a "flip-flop function" because it is only capable of "flip-flopping" between Sources A and B, in connection with the VCR, and Sources A, B, and C in connection with the TV. The channel selection occurs at one of the external electronic devices that contains a tuner for tuning the channel, namely the TV, VCR, or converter/descrambler, as explained above. Thus, Kurtz does not teach a central device that receives user input that selects a channel that corresponds to a signal carrying programming as required by claims 1-4, 15, and 18.

The Examiner cites to the Abstract, col. 1, line 11 – col. 2, line 7, col. 3, lines 15-39, and Figure 1 in support of his argument that a "user can use a remote control to select a channel." (Office Action, at 3). None of these citations, however, teach using a remote control to select a channel ***at a central device***. Instead, the only discussion of selecting a channel in these citations regards selecting a channel at the TV, VCR, and cable box.

First, the Abstract merely states that Kurtz is directed to an "[a]pparatus and method for switching between two input sources . . . ." Nowhere does the Abstract disclose selecting a ***channel*** at the switching device that corresponds to a signal carrying programming. As discussed above, the "two input sources" are Source A and Source B, each of which contains multiple channels of programming. The Abstract teaches an apparatus that merely "switches"

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[3] Claims 2-4, 15, and 18 depend directly or indirectly from claim 1.

between these two sources, not receiving input of a specific channel corresponding to a signal carrying programming.

The Examiner next cites to col. 1, line 11 – col. 2, line 7. (Office Action, at 3). This passage, however, merely discusses the background of the invention and does not discuss the switching device taught and claimed by Kurtz. Rather, this portion of the specification teaches:

> ***All channel tuning functions*** then, for both standard and premium channels, ***must by necessity be accomplished within the converter box***. The ***converter***, in effect, functions as a television receiver having an output which is directed to one channel, for example channel 03 of the subscriber's receiver. It ***becomes the channel tuning facility*** for the subscriber, for which he must normally pay a monthly rental fee. A remote control for the converter is typically offered to the subscriber, for yet another monthly fee.

(Kurtz, at 1:65-2:7 (emphasis added)). This passage teaches that "***converter box***" performs "all tuning functions."[4] This passage clearly does not teach a central device that receives input of a channel as required by claims 1-4, 15, and 18.

The Examiner also cites to Kurtz, col. 3, lines 15-39, as teaching receiving input at the central device selecting a channel corresponding to a signal carrying programming. (Office Action, at 3). This passage teaches using the remote control of the TV or VCR to actuate the switching function of the RF, AB switch.

> To achieve such source switching while not disrupting the ongoing operational status of the television receiver or video recorder, a control button or switch on the television receiver or video recorder dedicated remote device is selected which does not change or which reinforces that then present status. By holding the selected control button down ***at least a predetermined interval of time*** which is longer than that interval normally required, for example, to switch channels or increase volume, source switching activity will ensue.

[4] The "converter box" is not cited by the examiner as a "central device" as required by claims 1-4, 15, and 18. Indeed, the converter box cannot be the "central device" required by the claims because scrambled signals are routed from the "central device" to the converter/descrambler. (*See, e.g.,* claim 1 ("routing the scrambled signal from the central device to the descrambler")).

(Kurtz, at 3:21-29 (emphasis added)). According to this passage, ***any*** button of any remote control unit may be used to actuate the switching function of the RF, AB switch in Kurtz so long as the button is depressed for a "***predetermined interval of time***." This teaching is contrary to the Examiner's assertion that the switching device receives input selecting a channel corresponding to a signal carrying programming. As explained above, the switch disclosed in Kurtz merely "flip-flops" between input sources, and does not have the capability of selecting or tuning any specific channel. Thus, Kurtz does not teach teaching receiving input at the central device selecting a channel corresponding to a signal carrying programming

CONCLUSION

For the foregoing reasons, Appellant respectfully requests the Board to overturn the Examiner's rejections of the appealed claims 1-19.

Dated this 10th day of July 2006.

Respectfully submitted,

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CLAIMS APPENDIX[5]

Listing of Claims:

1. (Previously Presented) In a home entertainment system including a central device coupled to a plurality of electronics devices, wherein the plurality of electronics devices includes a display device and a descrambler, and wherein the central device manages the operation of the plurality of electronics devices, a method for tuning channels that are requested by a user for display on the display device, the method comprising the steps for:

receiving user input at the central device, wherein the user input selects a channel that corresponds to a signal carrying programming, and wherein the signal is received by the entertainment system;

using electronic programming guide data stored at the central device to determine whether the signal is scrambled or non-scrambled, wherein both the scrambled and the non-scrambled signals have to be tuned before being displayed;

if the signal is determined from the electronic programming guide data to be scrambled, performing the steps for:

routing the scrambled signal from the central device to the descrambler; and

using the descrambler to descramble and tune to one or more channels of the scrambled signal for display on the display device; and

if the signal is determined from the electronic programming guide to be non-scrambled, performing the step for:

using an internal tuner that is located at the central device to tune to one or more channels of the non-scrambled signal for display on the display device, and such that the non-scrambled signal can be displayed.

2. (Original) A method as recited in claim 1, further comprising, after descrambling and tuning the scrambled signal at the descrambler, performing the step for sending the descrambled and tuned signal from the descrambler to the central device.

[5] The claims are presented in their current status.

3. (Original) A method as recited in claim 2, wherein the descrambler is a cable box.

4. (Original) A method as recited in claim 1, wherein the user input is sent to the entertainment system by a remote control device.

5. (Previously Presented) A computer program product for implementing in an entertainment system that includes a central device coupled to a plurality of electronics devices, wherein the central device manages the operation of the electronics devices, a computer program product for implementing a method for tuning signals carrying programming that correspond to channels selected by a user, the computer program product comprising:

a computer-readable medium carrying computer executable instructions for performing the method, wherein the method comprises steps for:

using electronic programming guide data stored at the central device to determine whether the signal is scrambled or non-scrambled, wherein both the scrambled and the non-scrambled signals have to be tuned before being displayed;

if the signal is determined from the electronic programming guide data to be scrambled, performing the steps for:

routing the scrambled signal from the central device to the descrambler; and

using the descrambler to descramble and tune to one or more channels of the scrambled signal for display on the display device; and

if the signal is determined from the electronic programming guide to be non-scrambled, performing the step for:

using an internal tuner that is located at the central device to tune to one or more channels of the non-scrambled signal for display on the display device, and such that the non-scrambled signal can be displayed.

6. (Original) A computer program product as recited in claim 5, wherein the first signal is descrambled and tuned at the descrambling device.

7. (Original) A computer program product as recited in claim 6, wherein upon descrambling and tuning the first signal at the descrambling device, sending the descrambled first signal to the central device.

8. (Previously Presented) A tuning system for use in an entertainment system that includes a plurality of consumer electronics devices coupled to a central device, wherein the central device manages the operation of the consumer electronics devices, and wherein all signals received by the entertainment system pass through the central device, the tuning system comprising:

a first tuner that is located at the central device, wherein the first tuner tunes signals to one or more channels carrying programming that is non-scrambled, wherein the non-scrambled signal must be tuned prior to being displayed;

a second tuner at a descrambling device, wherein the descrambling device is one of the plurality of consumer electronics devices coupled to the central device, wherein the central device routes the scrambled signal to the descrambling device, and wherein the second tuner tunes signals to one or more channels carrying programming that is scrambled; and

an electronic programming guide stored at the central device, wherein the electronic programming guide includes data specifying whether a signal carrying programming is scrambled or non-scrambled and wherein the tuning system uses the electronic programming guide to determine whether the signal carrying programming is scrambled or non-scrambled.

9. (Original) A tuning system as recited in claim 8, further comprising means for selecting a channel, wherein the channel corresponds to a signal carrying programming.

10. (Original) A tuning system as recited in claim 9, wherein the means for selecting a channel includes a remote control device.

11. (Previously Presented) A tuning system as recited in claim 9, wherein when the electronic programming guide data specify that a selected channel corresponds to a scrambled signal carrying programming, means for routing the scrambled signal to the descrambling device.

12. (Original) A tuning system as recited in claim 11, wherein the scrambled signal is descrambled by the descrambling device and tuned by the second tuner.

13. (Original) A tuning system as recited in claim 12, wherein the descrambling device includes a cable box.

14. (Original) A tuning system as recited in claim 12, further comprising means for routing the descrambled and tuned signal from the descrambler to the central device.

15. (Previously Presented) A method as recited in claim 1, wherein receiving the signal by the entertainment system comprises receiving the signal at a single input of the central device, such that whether the signal is determined to be scrambled or non-scrambled, the signal is received at the single input of the central device.

16. (Previously Presented) A method as recited in claim 5, wherein receiving the signal by the entertainment system comprises receiving the signal at a single input of the central device, such that whether the signal is determined to be scrambled or non-scrambled, the signal is received at the single input of the central device.

17. (Previously Presented) A tuning system as recited in claim 8, further including an input over which both the scrambled and non-scrambled signals are received.

18. (Previously Presented) A method as recited in claim 1, wherein the routing is automatically performed upon determining from the electronic programming guide data that the signal is scrambled, and wherein the signal is automatically tuned by the internal tuner upon determining with the electronic programming guide that the signal is non-scrambled.

19. (Previously Presented) A computer program product as recited in claim 5, wherein the routing is automatically performed upon determining from the electronic programming guide data that the signal is scrambled, and wherein the signal is automatically tuned by the internal tuner upon determining with the electronic programming guide that the signal is non-scrambled.

EVIDENCE APPENDIX

Not applicable.

RELATED PROCEEDINGS APPENDIX

Not applicable.

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